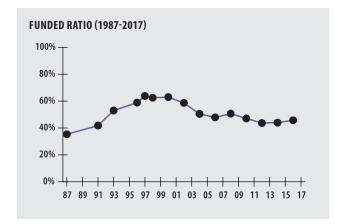
Middlesex County

P. O. Box 160 25 Linnell Circle Billerica, MA 01865 Phone 978-439-3000 or 1-800-258-3805 Fax 978-439-3050

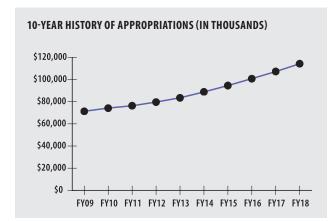
Board Members

Thomas F. Gibson, Esq. (Chairperson), John Brown, Brian P. Curtin, Robert W. Healy, Joseph W. Kearns

Board Administrator Lisa Maloney **Board Meeting** Varies



INVESTMENT RETURN (2013-2017, 5 YEAR AND 33 YEAR AVERAGES) 16% 14% 12% 10% 8% 4% 2% 13 14 15 16 17 13-17 85-17



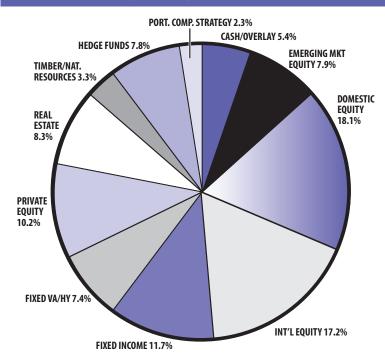
		ı
33 years 2017 8.55%	32 years 2016 8.30%	31 years 2015 8.34%
10 years 2017 5.61%	10 years 2016 5.05%	10 years 2015 5.64%
5 years 2017 9.42%	5 years 2016 8.79%	5 years 2015 7.49%

INVESTMENT RETURN HISTORY

ACTUARIAL

► Funded Ratio		45.8%
Date of Last Valuation		01/16
► Actuary		Segal
► Assumed Rate of Return		7.75%
▶ Funding Schedule		4.0% Increasing Phase-In
Year Fully Funded		2035
Unfunded Liability		\$1.35 B
► Total Pension Appropriation (Fiscal 2018)		\$114.2 M
	ACTIVE	RETIRED
Number of Members	9,072	5,327
► Total Payroll/Benefit	\$447.3 M	\$130.0 M
Average Salary/Benefit	\$ 49,300	\$24,400
► Average Age	48	NA
► Average Service	11.6 years	NA

ASSET ALLOCATION (12/31/17)



EARNED INCOME OF DISABILITY RETIREES (2016)

► Number of Disability Retirees	444
► Number Who Reported Earnings	111
► Number of Excess Earners	3
► Total Amount of Refund Due	\$22,447.35

▶ 2017 Return	16.76%
▶ 2017 Market Value	\$1.4 B
▶ 2013-2017 (Annualized)	9.42%
▶ 1985-2017 (Annualized)	8.55%